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DEPARTEMENT TOEGEPASTE ECONOMISCHE WETENSCHAPPEN

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A CRITICAL ANALYSIS OF SEGMENTAL REPORTING BASED ON AN INTERNATIONAL PERSPECTIVE: A GROUND FOR A BETTER REGULATION

by
V. THOEN
C. LEFEBVRE

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A critical analysis of segmental reporting based on an international perspective: a ground for a better regulation

Vincent Thoen and Chris Lefebvre
Department of Applied Economics
Katholieke Universiteit Leuven

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ABSTRACT

The financial statements of a company or group of companies give an overview of all activities of the reporting entity no matter how diverse these activities may be. However, as companies enter into new lines of business and new geographical areas - with different profit and growth potentials, varying types of risk and different returns - questions can be raised as to whether consolidated financial statements are still adequate in providing an insight into the results and financial position of the reporting entity as a whole. The additional disclosure of information about an enterprise's operations in different industries and in different geographical areas as an integral part of financial statements may provide a solution to this problem. This paper, therefore, presents a critical discussion of segmental reporting around three major aspects, namely motivation, evaluation and implementation. First of all, a motivation for legal requirements regarding segmental information is gathered from different theoretical perspectives. Secondly, a firm's incentives and impediments to both the voluntarily and the mandatory disclosure of segmental financial information are taken into consideration as they can have important implications. We conclude from this investigation that the direct and indirect costs, together with the implementation problems with respect to segmental reporting, do not outweigh the benefits resulting from an increased assessment of the entity's performance, an increased comparability of segments, and an improved control on management. Finally, we present an extensive overview of the major existing international and national accounting standards regarding segmental information disclosure. A clear distinction can be made regarding the degree of elaboration of the standards. Although company directors are left with considerable discretion regarding segment identification, the international standards as well as standards with an Anglo-Saxon origin provide more strict guidelines regarding the identification process and the information to be disclosed than does regulation from other European Union members. This investigation may be of interest to standard setting bodies in countries lacking an effective regulation on segmental reporting, as well as to accounting practitioners, and users of financial statements.

Keywords: segmental information, accounting standards, voluntary and mandatory disclosure

Vincent Thoen is a doctoral student in Accounting, Chris Lefebvre is a Full Professor in Accounting at the K.U. Leuven. Corresponding author: Vincent Thoen, K.U.Leuven, Dept. of Applied Economics, Naamsestraat 69, B-3000 Leuven, Belgium, Vincent.Thoen@econ.kuleuven.ac.be

1. Introduction

The financial statements of a company and the consolidated financial statements of a group summarize the results and financial position for the reporting entity as a whole. As a result, the financial statements give an overview of all activities of the reporting entity no matter how diverse these activities may be. However, as companies enter into new lines of business and new geographical areas, it is necessary to provide additional information in order that the usefulness of the financial statements is maintained. Different industries and different geographical locations have a variety of profit potentials, degrees and types of risk, growth opportunities, and also different rates of return and capital needs. This has raised questions as to whether consolidated financial statements, which become more highly aggregated, are adequate in these circumstances. The disclosure of information about an enterprise's operations in different industries, its foreign operations and export sales, and its major customers, as an integral part of financial statements may provide a solution to this problem.

A large academic literature debates the relative desirability of mandatory or voluntary disclosures of information by companies. The debate deals with the question of whether market forces will drive organizations to produce information needed by the market in a cost-effective manner, or whether organizations are inherently so secretive that they will disclose only where there is a mandatory requirement. Empirical evidence (Nagarajan and Sridhar (1996)) indicates that through increasing disclosure requirements regulators may induce firms to reduce their value-relevant disclosures suggests that actual disclosure policies and practices are a response to a complex pattern of pressures and influences on organizations. Firms will sometimes cut back on their voluntary disclosures in order to avoid proprietary costs entailed by more disaggregate disclosure requirements. Hence, the firm does not disclose value-relevant information that it would have revealed voluntarily in the absence of segment disclosure requirements. As a result, an increase in disclosure requirements can actually lead to a strict reduction in the firm's value-relevant disclosures or lead to the disclosure of less relevant information. Given that firms thus might react to a proposed disclosure standard in ways that are unintended by the standard setter, thereby potentially defeating the purpose of the standard, standard setters should be very careful in elaborating regulation

A related research field investigates the disclosure issue from a corporate perspective, especially arguments based on the potential usefulness of disclosed information to competitors. This argumentation is particularly relevant in an international setting where international competitors can release different information or apply different degrees of detail in their information provision. According to Emmanuel & Garrod (1992) the single most significant cost associated with the voluntary disclosure of segmental information relates to the competitive disadvantage, particularly in an international environment with non-uniform reporting. The perceptions by directors relating to this disadvantage may lead to disclosure choices which reduce the value of information in order to avoid competitors gaining knowledge, thereby influencing the quality of disclosure (Foster (1986)).

Evaluating the existence of a gap between the segmental disclosure practice by companies and the financial statements users' informational needs may lead to a proposal of some guidelines to the standard setters and professional bodies in order to fill this gap. Even when information disclosure is mandatory, the actual disclosure may be variable in quality. Therefore, the role of standard setters may be to provide the production of good minimum quality disclosure of mandated information. Some accounting standard setters have recognized the need for this minimum level of disaggregated information and reacted accordingly by issuing detailed accounting standards dealing with the issue, while other national accounting regulators have left a lot of options open resulting in a less comparable and useful information provision. As a consequence, it is appropriate to provide a clear insight into the diverging regulations that exist regarding segmental information disclosure requirements, which is what this paper clearly wants to achieve.

The remainder of the paper is organised as follows. The following section deals with several theoretical argumentations indicating a need for segmental reporting. The third section will concentrate on the positive aspects of segmental reporting. Three positive consequences all related to the increase in informational content arising from segmental reporting are discerned. In addition, a section will discuss the negative consequences of this additional form of disclosure. On one hand, the introduction and implementation of segmental reporting will lead to a number of direct and indirect costs, on the other hand some practical implementation problems need attention. The fifth section gives a clear and detailed analysis of the most important and relevant international and national accounting regulations dealing with segmental reporting. The last section provides some important conclusions.

2. Theoretical funding

The foundation of segmental reporting can be found in a number of diverging paradigms or theorems, which all are being introduced and supported by different authors. A set of four theoretical frameworks that obtained a lot of support in academic literature and are characterized by an accounting and/or finance background, will be briefly presented in so far as they can be considered a factor creating the need for segmental information. A further, more profound development of these theoretical backgrounds does not fall within the scope of this research paper. The "fineness"-theorem together with "market efficiency"-theory, "accounting"-theory and "agency"-theory explain and motivate the need for a reliable form of financial reporting.

2.1. The "fineness"-theorem

In Mohr's opinion (1983) the raison d'être of segmental reporting can be explained by this "fineness"-theorem, which states that if one has access to two or more information sets, the one containing the highest level of detail will be at least as meaningful and valuable as the other one. Formally, the theorem states:

> *"Given two sets containing the same information, if one is broken down more finely, it will be at least as valuable as the other set."*

When applied to the discussion on segmental reporting, this means that segmented information will never contain redundant or useless information. The information provided will at least be as valuable as aggregated financial statements information.

This theorem pleads strongly in favor of the application of segmental reporting, but it does not take into account the costs resulting from this application in practice. These costs contain not only preparation costs but also costs arising from the competitive loss (see Section 4.1.2). It should be noted, however, that the impact of these costs could be limited by using for segmental reporting purposes the segments corresponding to the organizational structure of the entity. In addition, a well-organized company or entity will collect more regularly more detailed information for internal management purposes. As a result, the costs of preparing segmental reports will be limited.

In a competitive environment, it matters to examine if the publication of individual elements within the framework of segmental reporting contributes to an improved prediction of the future flow of revenues and expenses. If a certain element does not contribute to that objective, it will be useless to provide information regarding that element.

2.2 Market efficiency theory

The financial theory of market efficiency applied to capital markets, states that all available information regarding a security is already incorporated into the price of this security. Fama (1970) made a distinction between three forms of efficiency: the weak form, the semi-strong form, and the strong form, in accordance with the available information.
In order to create an efficient market it is of great importance to have reliable and proper information at one's disposal. Segmental reporting may effectively lead to more efficient markets given that all information on a line of business or geographical segment increases the transparency of the company and leads to a situation in which future cash flows can be predicted more thoroughly (Radebaugh (1987)).

2.3 Agency-theory

The well-known agency theory assumes a tense relation between principal and agent. In the context of justifying the need for segmental reporting, the reporting company's management can be considered as being the agent, while the users and stakeholders of the financial statements – notably investors, employees, competitors, clients, suppliers, government, etc. – take the role of principal. Both parties aim at maximizing their own personal utility, which logically creates a diverging opinion on the quantity, the level of detail and by what means the information regarding the company should be made public. If the provision of certain information is costly to an agent, he will prefer to disclose less information than the principal would like to obtain. For instance, competitors may try to take advantage of company specific or private information when this is made public. Nevertheless, it should be noted that the information provided regarding the segments by a diversified company would not be more detailed than the information released by non-diversified companies. Management can, however, attempt to prevent financial statement users, like employees and trade unions for instance, to compare earnings figures from different segments by withholding information.

In an environment without legislation regarding segmental reporting, like in the 1960's in Europe, the amount of published information will depend on the power balance between both parties and the pressure they can put on each other. If the agent possesses a reasonable degree of independence towards the principal, he or she will only provide information on a voluntary basis. If management, on the other hand, is strongly tied to the information users because of financial or other specific reasons, it will be obliged to pass on more and more detailed data.

A significant progression concerning segmental reporting was realized when financial analysts started looking in a less advantageous way at companies that did not supply segmental information. Their negative attitude towards and less favorable appraisal of companies that refused to supply segmental information implied a negative influence on the value of the shares of these companies. Management was correspondingly forced to provide more and more information.

2.4 "Accounting"-theory

According to the "accounting"-theory (Emmanuel & Garrod, 1992), the provision of segmented data is required in order to be able to appraise the uncertainty and to better value the company's activities. Moreover, this disaggregated information allows to make a profound judgment of the risks inherent to the company and to make more accurate earnings predictions. Besides, segmental information can demonstrate to constitute an important source of information in case of mergers and acquisitions. There is strong empirical evidence that disaggregated data disclosed by companies have significant information content for users of financial statements. Segment data provide the basis for a more refined evaluation and estimation of a company's future development than would otherwise be possible from published information.

3. Advantages of segmental reporting

The objective underlying the legal requirements on financial statements reporting reflects investors' need to obtain a clear insight into the results and financial position of the reporting entity as a whole. As a result, all activities in which the reporting entity is involved will be included in these reports, no matter how diverse the activities may be. However, as companies enter into new lines of businesses and new geographic areas, financial statements become less complete and less useful without additional information. Different industries and different geographic locations have a variety of profit potentials, degrees and types of risk, growth opportunities, and also different rates of return and capital needs. This has raised questions as to whether consolidated financial statements are adequate in these circumstances. If accounting information has to be useful for users to reduce the uncertainty, it is necessary not only to provide consolidated accounting information, but to disclose segmental information as well.

Expert users of financial statements almost always consider information about segments by far the most interesting part of the total package and it is increasingly regarded as an important component of annual reports by the national standard setters of most countries. Besides, market efficiency may improve considerably when high quality segmental information is disclosed since this will allow financial information users to employ the available resources more efficiently by reducing uncertainty.

Research has shown that forecasts using segment information are more accurate than forecasts using only aggregated information, both in theory (Barnea and Lakonishok (1980); Hermann & Thomas (1997)) and in practice (Emannuel, Garrod & Frost (1989); Balakrishan, Harris & Sen (1990); Hermann (1996)).

It should be noted that the main goal behind the provision of additional financial information on a consistent basis allowing comparison over time is twofold. On the one hand, the objective should be to assist users better to appreciate the results and financial position by permitting a better understanding of past performance and thus a better assessment of future prospects. On the other hand, the objective should be to make all concerned parties aware of the impact that changes in activities might have on the entity as a whole. Three positive consequences all related to the increase in informational content arising from segmental reporting can be perceived. Not only will the disaggregated information lead to a better assessment of the entity's performance, but it will also increase comparability and improve effective control on management.

3.1. Improved assessment of an entity's performance

The complexity of multinational enterprises' operations leads to the awareness that the consolidated financial statements are likely to be less revealing without some disaggregation of the accumulated information. Besides, if a user of financial statements should be able to assess past performance and to establish a forecast of future performance of the entity, then it may be argued that there is a need for them to be provided with detailed information on all individual segments. Segment reporting may, for instance, lead to the release of important "hidden data" that are otherwise aggregated in consolidated statements. Consolidated and segmental statements can, thus, be considered as complementary forms of reporting. Each is necessary to make a more informed assessment of the entity's past performance and to establish forecasts of its future performance. At the same time segmental information may provide a better appreciation of the risk associated with the company as a whole but also of its parts. Performance prospects, riskiness, and growth opportunities vary by industry but also by geographical markets. The more in-depth analysis of the performance and risk associated with the activities of a company may lead to more profound investment decisions. Therefore, segmental information is increasingly considered as an essential component of financial reports. Users may also combine segmental information with company specific or more general information to improve their understanding of the entity's performance and future prospects or to compare the performance of individual segments with those of similar corporations.

3.2 Enhanced comparability

By means of segmental information, the performance of the entity's segments can be compared more accurately with that of other entities and with a benchmark that is determined within the segment in which the entity is operating. These other entities can be diversified corporations, as well as small individual enterprises operating in the same type of activity or same geographical market. After all, segmental data create the opportunity to calculate certain segment ratios for a specific line of business or geographical areas within the entity's activities. This may lead to an identification of the causes (strengths or weaknesses, opportunities or threats) leading to the divergence with the segment's benchmark. Accordingly the comparability of an entity with its competitors can be enhanced, which in turn can lead to more accurate decisions. However, comparing segment data between companies can be misleading due to the wide variety of measurement techniques in use. Since comparing is valuable only if it is based on data that are comparable and of the same nature, some sort of legislation is generally required to obtain this goal.

3.3 More efficient management control and increased influence on management

Finally, segmental reporting may also entail a more effective control by investors on management, as well as an increased control of management on the enterprise and its divisions. Each company benefits from an efficient management and use of the resources available. Investors want to verify the efficiency of the use and management of funds allocated to a company in order to decide in which corporations to invest. This evaluation can most accurately be made on the basis of information that is as detailed and disaggregated as possible. Using segmented data, it is possible to compare the financial performance over different segments and at the same time assess the performance of management by segment. Besides, segmental reporting may create an incentive for the entity's and segments' managers. Not only the salaries of a segment's management may be conditional upon the segment's performance, also the segment's budget for the following period may dependent on the current period's performance. Management, therefore, will attempt to act as efficiently as possible.

4. Disadvantages of segmental reporting

In relation to the disclosure of any financial information, a number of less favorable factors can be noted. These disadvantages can be classified in two broad categories, the first relating to costs resulting from the publishing of additional corporate information, the second to difficulties one can experience when introducing the reporting requirements. Both categories will be discussed in more detail. It should be noted that besides these cost-related and practical issues, a number of other arguments against additional reporting could be derived. Some are more relevant than others and may stem from one's attitude towards more or less disclosure and accountability.

Though the main disadvantages of segmental reporting are related to its providers, it should be noted that the users of this form of information have to be careful when interpreting the disaggregated data included in the financial statements. Since many companies limit the extent of disaggregation to broadly defined lines of business and geographic areas and there is a lack of effective criteria to identify segments, especially with respect to the line of business, current practice is often arbitrary and results in disclosure with limited information content given the limited guidance provided in regulation. (Accounting standards only provide a number of factors to be considered: significance of foreign operations, competitiveness, geographic proximity, and economic affinity). The main concern is whether the level of disaggregation permits sufficient insight into the risk-return differences.

4.1 Direct and indirect costs resulting from disclosure in general

The disadvantages of reporting financial information are often related to the costs that follow from it. Different kinds and sources of costs can be perceived. The costs can be assigned to either the costs following directly from the reporting task itself or to the indirect costs stemming from the publication of more information.

4.1.1 Direct costs

The direct costs can be linked to the reporting process itself, for instance the time necessary to "translate" and allocate data to a more detailed or disaggregated level. Companies have argued against increased segmental reporting referring to several direct costs originating from compilation, increased audit costs, and misinterpretation of the information by users (Gray et al. (1990)) For companies with an internal structure organized around segments and sub-segments, these additional costs will not be so considerable because most detailed information is already available. After all, this segmental information is required for planning and internal control purposes per segment.

Given the fact that legislation in many countries leaves room for interpretation regarding the determination of segments, these costs will be rather limited for corporations based in these countries. In countries where segments cannot be freely determined, costs will be more important, especially when the organization's internal structure in departments or segments differs from that required to obtain the necessary segmental information. Besides, given the further increasing computerization and automation of information processing and management, one can expect that additional costs resulting from elaborating this information will continue to decrease. Finally, one should note that many corporations already possess the necessary financial information because of the compulsory provision towards the workers councils (e.g. Belgium) or because of its application in planning or internal control activities.

4.1.2 Indirect costs

The supply of detailed financial data also provides other interested parties, like competitors, suppliers, clients, employees and (local) governments, with information that might be of importance to them, but might not be obtained from consolidated or other financial statements (Emmanuel and Garrod (1992), Edwards and Smith (1996)). For instance, this information may attract competitors' attention on certain profitable opportunities. Or it may lead competitors to conclude that certain segments within their own organization are not realizing the same performance level. Nonetheless, it should be noted that segmental reporting does not necessarily offer information that is as detailed or specific as one might hope. Segmental data may give an indication of the performance of the company and its activities in different segments, but this information will not disclose the reasons behind this performance. A certain level of aggregation will ensure that company specific information on individual products or markets remains private.

Third parties can take advantage of a clear and detailed insight into the entity's performance, which may be used in their relationship with the entity or its management. For instance, when suppliers or customers can derive from the segmental information that certain activities of a company in which they are involved directly or indirectly as well are extremely profitable, they may be inclined to change their attitude in their relationship with the company. A similar reasoning holds for the company's employees and trade unions, when they obtain a more detailed insight into the company's performance based on the segmental data, they may alter their approach in the negotiations with the company's management. The costs resulting from third parties' access to and knowledge of this additional information should not be ignored, though they are very hard to measure. The results of an empirical study by Garrod (2000), for instance, suggest that any competitive disadvantage suffered by companies from disclosing segmental data is extremely limited. Besides, this argument only stands if companies are treated differently with respect to the disclosure requirements of segmental data, which is the case in an international environment with diverging accounting legislations. Otherwise, if every company provides the same segmental information based on similar reporting requirements, then the argument of competitive disadvantage will no longer hold and the provision of segmental data even will become an advantage given users' information demands.

4.2 Practical implementation problems

When applying segmental reporting standards, accountants can be confronted with two major problems that demand considerable attention and reflection. First of all, the question arises on what basis the definition and identification of segments should be carried out. Related with this problem is the determination of segment size and, consequently, the number of segments to be disclosed. Secondly, given the limited guidance provided in existing regulation, it is not always clear what kind of information should be provided as well as how certain data should be treated, in particular common expenses and revenues. As a result, accounting classification and allocation problems are clearly inherent to segment reporting. The lack of effective criteria leads to a situation in which current practice is often arbitrary and results in the disclosure of information with limited information content. As a consequence, the main concern is whether the obtained level of disaggregation permits sufficient insight into the risk-return differences.

4.2.1 Identification of segments

A major implementation problem concerns the identification of segments. Three main elements need attention with respect to this issue. First of all, it is necessary to determine in advance which critical characteristics will be used to distinguish one segment from another. Clearly the activities reported as one segment should be homogeneous to each other and heterogeneous to other segments' activities. A second crucial decision in the identification process concerns the selection of a segmentation dimension. In principle, a corporation can choose one or combine more dimensions out of the four main methods available for identifying segments, namely segmentation based on line-of-business, based on geographical areas of activities, based on the internal corporate structure, and segments for each individual market in which the company is operating. Of course these classification bases can be combined. The choice of the segmentation base should be made with the intention to optimise the entity's financial reporting. The first segmentation method divides a company into segments based on the company's operating activities. The second method applies segmentation by means of a geographical criterion, which requires a decision on the level of detail that will be maintained. A third way of identifying segments reflects the internal organizational structure of the company. Finally, a fourth option is to identify one individual segment for each individual market in which the company operates.

Clearly, the first two segmentation methods emphasize the difference in risk and profitability between segments more than the two latter ones, which are more company specific and thus lead to a lower level of comparability of companies. The third and final element in the segment identification process concerns an evaluation of the significance or materiality of the identified segments. Since only material information is decision relevant, it is reasonable to report a particular segment only if it is material enough to have significance in view of the company's or entity's economic activities. Several accounting regulating systems, therefore, provide quantitative materiality guidelines or thresholds, which are essentially size criteria. If such thresholds do not exist, it is left to the discretion of management to judge on the segment's significance and to decide whether it should be reported separately or not.

The impact of this reportable segment identification process on the quality and usefulness of disclosed information has been subjected to research for a long time. Gray (1981), for instance, notes that segment identification has not been well specified in any regulation worldwide and as a consequence directors have been given considerable discretion and flexibility in their choice of segments. The fact that segmentation based on different approaches does not lead to information that is equally comparable and useful for users might even be used as an argument in the discussion about the need for more accounting standards harmonization. It should be noted that as a starting-point for segment identification, one should always consider diverging risks across and among segments. After all, this will lead to the kind of information the main users of segmental information, investors and potential future investors, are looking for. This leads to the suggestion that the line of business and geographical segmentation can be considered the most appropriate option. The preference for these two methods is also reflected in existing regulation regarding segmental reporting (e.g. IAS 14).

4.2.2 Identification of information to be disclosed

Another problem area concerns the nature of the information to be disclosed. In general, financial accounting requirements on segmental reporting only require the disclosure of a limited number of specific disaggregated elements. Traditionally the most common items that need to be disclosed by segment include sales, result, and assets. The content and interpretation of each of these elements depend very much on their definitions. While the definitions of these elements can be different from one accounting standards set to another, a broad general agreement on the major issues mostly exists.

The term "segment sales", which is equal to segment turnover or segment revenue, generally consists of not only the revenue from sales to external customers, but also the revenue stemming from transactions with other segments. In fact, segment requirements often require the separate disclosure of total revenue, revenue from external sales, and revenue from internal sales for each individual segment. In a few standards (e.g. IAS 14) other (operating) revenues have to be included in the figure for segment sales. In relation to the determination of segment turnover, the discussion about transfer prices to be used in intra-group transactions should be given some attention since these transfer prices determine the revenue from transactions with other segments. A general rule when determining internal transfer prices may lie in the use - as a starting point – of those prices which would normally be applied in a transaction between independent parties. This refers to the so called "arm's length principle". Of course, for a large number of specific internal transactions comparable external transactions do not exist. In those circumstances, fairness and reasonableness should be respected. It is important not only that the amount of inter-segment sales is disclosed separately, but also that the bases for determining the inter-segment pricing are identified. Otherwise, segmental analysis may be very misleading if there is substantial trading between segments, especially if this trading occurs at artificially determined prices. Besides these inter-segment sales are not disclosed in consolidated financial statements, nor can they be deducted from the information in these statements.

The segment result or segment profit or loss is mostly defined as the difference between segment revenue and segment expenses. In general, segment profit reflects operating profit because normally items such as interest income and expense, taxes on income, and extraordinary items are not included, although other bases are possible. Where an analysis of profit or contribution is required, there is the important problem of dealing with joint costs that are not directly attributable to one specific segment. When a common cost or revenue is registered, according to the "matching principle" it should then be assigned to those segments responsible for creating it. If these costs and revenues are not assigned to the segments, it will not be possible to determine objectively each segment's share in the performance of the entity as a whole. Consequently, these costs and revenues should be allocated on a reasonable and fair basis. The discussion of the issue of common costs and revenues will not be the elaborated in more detail in this paper since it is not the main focus of our study. Besides, the topic of common costs and revenues is the base of a wide research field on its own.

In addition to segmental revenue and result data, the segmental information would appear to be of limited use without some indication of the net assets used in each segment. After all, the disclosure of the segment assets or assets employed allows to evaluate the segment's performance because it gives an indication of the resources employed in order to generate the segment revenues and profit. Although the definition of segment assets is left open, mostly total assets are reported, including intangibles, but excluding financial assets. Apart from the three main elements mentioned, some standards require additional elements to be disclosed or sometimes companies reports voluntarily additional information. These elements can include for instance segmental liabilities, depreciation, depletion and amortization expense, interest income and expense, income tax or benefit per segment.

5. Existing accounting regulation: an overview

The extent of segmental disclosure in practice varies substantially among countries. Factors explaining such differences would seem to include the relative size and stage of stock market development, the importance of multinational companies, attitudes towards disclosure, and, last but not least, the regulatory environment. Besides, several studies provide empirical evidence that a growing number of diversified companies disclose considerably more segmental information than they are required by law to do in order to meet the information needs of the companies various stakeholders. Other companies, however, feel that disclosing information about segments may weaken their competitive position because more detailed information is made available to competitors, suppliers, customers, and others. Therefore, they argue for less extensive disclosure requirements. But this point appears doubtful because if segment information intensifies competition then it should be considered advantageous to society as a whole.

A crucial factor affecting the difference in segmental reporting behaviour throughout the world concerns the often very diverging accounting legislation in general and regarding segmental reporting in particular. Few countries have accounting regulations or standards concerning segmental reporting and where they exist they tend to be structured in very broad terms. One can discern two distinct reasons demonstrating the need for more in-depth legislation concerning segmental reporting. First of all, enterprises are not always inclined towards disclosing much information. Often they restrict themselves to the legally required minimum level. Besides, the rise of the number of (global) mergers and acquisitions and the resulting increase in scale or consolidation of companies or groups leads to an important loss of information. The implementation of accounting standards with respect to segmental reporting can consequently not only limit the loss of useful information, but at the same time assure a minimum of information on a disaggregated level. Secondly, one of the most important goals of segmental reporting aims at facilitating the judgment and comparison of the results and financial position of diversified reporting entities. Some conformity in reporting is desirable in view of the comparability of information. As a result, it is clear that not only legislation per se is important, but also that a certain degree of conformity in national and international standards is recommendable. In view of providing a clear understanding of these different legal frameworks with respect to segment reporting, the important and crucial elements will be elaborated and described in more detail for a number of leading international and national regulating systems.

5.2.1. United Nations (ISAR) and OECD

During the 1970s the United Nations decided to investigate the impact of multinational enterprises on the economic development and international relationships by appointing a 'Group of Experts". The final objective was the development of a so-called "Code of Conduct" (cf. UN Commission on Transnational Corporations) which multinational companies have to obey since the investigation demonstrated that there was not only a lack of comparability of the financial information provided by these multinational enterprises, but it also showed that there was a general lack of information, financial as well as non-financial. Within the framework of the "Code of Conduct", the provision of a regulation regarding financial reporting by these kinds of companies was included. The goal was to elaborate a list of financial and non-financial items that will have to be included in the publication of the annual statements by multinational enterprises.
The UN's proposals, which were published in 1977, mainly favored the implementation of segmental reporting. After adaptations and modifications in 1988 and 1994, mainly the publication was recommended by the Intergovernmental Group of Experts on International Standards of Accounting and Reporting (ISAR), an intergovernmental body within the UN dealing with financial reporting: segmented information by line of business and geographical area regarding external sales, internal transfers, operating income, and, if possible, assets employed. Although, the United Nations's contribution lead to the most extensive and comprehensive

regulation regarding segmental reporting, companies are not required to follow the UN guidelines unless they are adopted by member countries.

The Organization for Economic Cooperation and Development (OECD) is an intergovernmental organization of 24 industrialized nations. For instance, all Member States of the European Union are part of this organization. The objectives of the OECD, which mainly are oriented towards defending the interests of the Western industrialized countries, include the development of policy instruments to promote the world economy and multinational global trade. In 1976 the "*Declaration on International Investment and Multinational Enterprises*" was published in view of stimulating the relationship between multinational enterprises and the respective governments and improving economic growth. Because it became apparent that several enterprises did not comply with these guidelines, additionally a number of similar reports were issued that encompassed a further refinement of the guidelines (cf. revision in 1979). The OECD's guidelines regarding segmental reporting aimed at far-reaching and detailed levels of publication of information, like turnover, operational income, new capital expenditures, and number of employees, based on geographical segmentation. Information provision based on business activities was also supported, but did not receive as much attention. OECD guidelines are persuasive rather than legally enforceable. Figure 1 provides a summary of the most important elements relating to segmental reporting legislation issued by the United Nations and the OECD discussed above.

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Insert Figure 1 About here

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5.2.2 International Accounting Standards (IAS)

(a) General

With respect to its segmental reporting standard dating from 1981[1], the International Accounting Standards Board (IASB) implemented a revision resulting in the issue of IAS 14 "Segment Reporting"(Revised) in July 1997. The standard applies to accounting periods beginning on or after July 1, 1998. Although IAS 14 has no enforcement power nor has any other IAS, it is the most important of the international accounting propositions and guidelines in terms of its influence on international accounting practice and it serves as a model for countries to consider in setting their own standards. An adequate international standard on segment reporting had always been of particular importance to securities regulators, including IOSCO. As a matter of fact, IAS 14 was included in the list of core standards identified by IOSCO. Figure 2 provides a comprehensive synthesis of the main elements that will be discussed. Similar overviews will be included when discussing the other (inter)national regulation regarding segmental reporting.

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Insert Figure 2 About here

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[1] IAS 14 "Reporting Financial Information by Segments"

IAS 14 applies to the financial statements of all enterprises whose equity or debt securities are publicly traded or which are in the process of issuing such securities in public markets. Enterprises whose securities are not publicly traded are encouraged, but not required, to include segmental disclosure required by IAS 14 in their financial statements. However, if such a company chooses to disclose segment information, it must comply fully with IAS.

Segment information needs to be presented only on the basis of the consolidated financial statements when a financial report contains both the consolidated financial statements of an enterprise whose securities are publicly traded and separate financial statements of all consolidated firms (parent, subsidiaries or an equity method associate or joint venture). Therefore, segment information is not required based solely on the listed parent's financial statements when consolidated financial statements are published. If securities of a subsidiary, associate or joint venture itself are publicly traded, it will, however, have to present its own appropriate segment disclosures in its own financial statements.

(b) Information to be disclosed

Segment revenue (sales), segment expense, segment assets employed and segment liabilities are the key elements of the information disclosed about segments and required by IAS 14, as well as the basis of inter-segment pricing for each reported segment. This latter corresponds to the actual transfer pricing practice used in the enterprise. An enterprise should report this information for both business and geographical segments. All other segment disclosures are related to these four key elements. Items are included in the main elements when they are directly attributable to a segment and the amounts can be allocated to a segment on a reasonable basis. This should be judged by looking to the internal financial reporting system.

Segment information should be prepared in conformity with the accounting policies adopted for preparing and presenting the financial statements of the enterprise, thus in accordance with IAS. This is a major difference from the US standard, which requires the use of the same accounting policies as are used in the internal reporting system. There is one important respect in which the accounting policies used in segment information differ from those used in the financial statements. The four key segment elements are determined before the elimination of intra-group balances and transactions between different segments, while such balances and transactions are eliminated in preparing consolidated financial statements.

Under IAS 14 one basis of segmentation is to be primary and the other secondary (cf. *(c) Segmentation*). For each primary segment, the firm must disclose: segment revenue, segment revenue from sales to external customers and revenue from inter-segment transactions segment (operating) result; the basis of inter-segment pricing; segment assets and liabilities; segment depreciation and amortization; other non-cash expenses per segment; capital investments in property, plant and equipment and intangibles for each segment; and some less important elements. Less disclosure is required of secondary segments than primary segments. Nevertheless, an enterprise may make the same disclosure for its secondary segments as it makes for its primary segments. For secondary segments, depending on which type of segment, business or geographical, is identified as the primary format, elements to be disclosed can generally be defined as segment revenue, segment assets, and capital investments in property, plant and equipment, and intangibles for each segment.

The sum of the information disclosed for reportable segments and the aggregated information in the consolidated statements should be equal. Otherwise, a reconciliation statement between the information disclosed for reportable segments and the aggregated information in the consolidated statements has to be disclosed.

(c) Segmentation

The definition of segments and guidance on the application of those definitions was one of the important issues in the development of the revised IAS 14. IASB provided two detailed, but opposite approaches to the identification of segments. On the one hand, the '*risks and returns approach*' defines segments by reference to the dominant sources of risks faced by and returns flowing to the enterprise (favoured by IAS 14), while on the other hand the '*management approach*' describes segments by reference to the enterprise's organisational structure and internal financial reporting system (favoured by US standard setters).

The revised IAS 14 continues to favour the first approach but acknowledges that the predominant sources of risks affect how most enterprises are organised and managed. Therefore, by accepting that the internal financial reporting structure is normally the basis for identifying the predominant sources of risks and differing rates of return, the organisational structure and internal financial reporting system should form the basis on which segments can be identified for external reporting purposes (i.e. management approach).

IAS 14 (r97) takes a three-step approach to the identification of segments for external reporting purposes. The first step concerns the identification of primary and secondary segments, followed by the identification of business segments and geographical segments, and the identification of reportable segments constitutes the last step.

To identify its primary and secondary segments, an entity has to determine whether the dominant source and nature of its risks and returns is determined by the business or geographical dimension. The dominant source, either business or geographical segments, is identified as the segment type which will be used in the primary reporting format with the remaining source identified as the secondary reporting format. As was clearly indicated in the previous paragraph dealing with disclosed elements, full segment disclosure is required for the "primary segments", while less detailed disclosure is mandatory regarding the "secondary segments".

Once a decision is taken on which type of segments will be the primary and secondary, the individual segments within each type need to be identified. An enterprise's business and geographical segments for external reporting purposes are those organisational units for which information is reported internally to management, thus reflecting the internal financial reporting. As a general rule applicable when defining segments, a single segment, either business or geographical, should not contain operations with significantly differing risks and returns. Management will need to keep this objective of identifying segments with differing risks and returns in mind during the identification process of individual segments.

Finally, since it is not required to disclose all segments separately, reportable segments have to be identified. In some cases, for instance, it may be appropriate to combine several segments for reporting purposes. Therefore, IAS 14 identifies 'reportable' segments as segments for which disclosure is mandatory. Such a reportable segment can be defined as a business or geographical segment that earned a majority of its revenue from sales to external customers and for which revenue from sales to external customers and from transactions to other segments is 10 per cent or more of total revenue; or for which segment result is 10 per cent or more of the combined total result, or whose assets are 10 per cent or more of the total assets of all segments. When an internally reported segment is below all of the thresholds, management has three options. First, management can designate it as a reportable segment despite its size. Secondly, it can be combined with other, but similar[2] segments that are also below the 10 per cent thresholds. Finally, such a segment can be included as an unallocated reconciling item.
After an enterprise's management has identified the reportable segments, it needs to check if total external revenue attributable to the reportable segments constitutes at least 75 per cent of the total consolidated revenue. If this requirement, however, does not hold, additional segments must be identified as reportable segments, regardless of the 10 per cent thresholds, until at least 75 per cent of total revenue is included in reportable segments.

(d) Conclusion

Only four countries have developed their own segmental reporting regulations independently from IAS 14. Australia, Canada, the UK, and the USA consequently possess very detailed national standards all based on the Anglo-American accounting approach. Nevertheless, IAS 14 remains very important for other countries throughout the world. Although the revised IAS 14 was approved in January 1997, its publication was postponed until July 1997 to allow for harmonisation efforts by, among others, the US and Canadian standard setters.

An adequate international standard on segment reporting had always been important to IOSCO. As a result, IOSCO had advised the IASB that a majority of its members favour the IASB's approach in the revised IAS 14 and all the members of its working party on multinational securities offerings would be prepared to recommend acceptance of the IAS. Besides, IAS 14 was included in the list of core standards identified by IOSCO, a necessary condition for IASs to be acceptable for financial statements used in cross-border financing transactions. The difference between the revised IAS 14 and the revised US standard may have been a potential obstacle to the SEC's support but the SEC's staff has concluded that the IASB's approach has 'substantial merit'.

[2] Substantially similar according to IAS 14 means that segments have to exhibit similar long-term financial performance and have to be similar regarding the factors that define the type of segment (i.e. business or geographical segment).

5.2.3 United States

(a) General

In June 1997 the Financial Accounting Standards Board accepted SFAS No. 131 *"Disclosures about Segments of an Enterprise and Related Information"*. SFAS 131 became effective for fiscal years beginning on or after January 1, 1998. It superseded SFAS 14 *"Financial Reporting for Segments of a Business Enterprise"* dating from 1976, although the SEC already required reporting of line of business information since 1969. The driving force behind this new standard was the importance placed on segmental information over the years and the inadequacy of the existing segmental reporting standards. SFAS 131 represents a significant modification in US segmental reporting guidelines and requires companies to report disaggregated information about reportable segments based on management's organization of the enterprise.

The purpose of SFAS 131 is to help users of financial statements to better assess the future prospects of a company. At the same time, the US standard aims to provide detailed information about an enterprise's different types of business activities and economic environments. The selection of appropriate reporting segments is key to attaining the purpose of SFAS 131, namely improving users' assessment of the future prospects of a company. Figure 3 provides a clear insight in the key elements following from SFAS 131.

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Insert Figure 3 About here
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The scope of the standard is limited to public business enterprises, which are enterprises that have issued or are planning to issue debt or equity securities that are traded in a public market. The statement does not apply to parent enterprises, subsidiaries, joint ventures, or investments accounted for by the equity method if the separate company statements of these enterprises are also consolidated and both the separate company statements and the consolidated statements are included in the same financial report. Thus, segment information needs to be presented only on the basis of the consolidated financial statements when one financial report contains both the consolidated financial statements and separate financial statements. If, however, the enterprises included in the consolidation are public enterprises and their financial statements are issued separately, these enterprises have to present their own appropriate segment disclosures in their own financial statements.

(b) Information to be disclosed

Under SFAS 14 firms were required to disclose revenues from external customers and revenues from transactions with other segments; profit or loss; depreciation, depletion, and amortization expense; unusual and extraordinary items; total assets; capital expenditures; equity in the net income of investments accounted for by the equity method; the amount of investment in equity method investees; and total expenditures for additions to long-lived assets. For many companies this resulted in a double set of segment information, namely information used by management internally and information reported externally in conformity with the standard. Firms had to disclose this information only if the amounts per line of business or geographical segment exceeded ten percent of the consolidated amount.

For each reportable segment, SFAS 131 requires in addition to the items included in SFAS 14 (internal and external revenues, basis f inter-segment pricing, profit or loss, depreciation, depletion, and amortization expense; unusual items; total assets, capital expenditures, extraordinary items; equity in the net income of investments accounted for by the equity method; the amount of investment in equity method investees, and total expenditures for additions to long-lived assets) the disclosure per segment of other significant non-cash items (other than depreciation, depletion, and amortization), interest expense, interest revenue, and income tax expense or benefit only if the specified amounts are included in the measure of segment profit or loss. For each reportable segment disclosure of the specified amounts included in the determination of segment assets should be made. A general information element that should be made public concerns the factors used to identify the reportable segments, including the basis of management's internal organization and the types of products and services from which each reportable segment derives its revenues.

Consequently, the number of items disclosed for each segment, which in fact can all be related to segment profit/loss and segment assets, increased significantly following the adoption of the new standard. Besides, reconciliation needs to be made if the total of the reportable segments differs from the total of the enterprise's consolidated statements. Such reconciliation is necessary for the revenue numbers, elements of profit or loss, assets, and amounts for every other significant item.

(c) Segment identification

Under SFAS No. 14 (FASB (1976)) segmental information was disclosed by both line-of-business and geographic area with no specific link to the internal organization of the company or the measurements that were used for internal decision making.

Under SFAS 131 (FASB (1997)) firms are required to identify reportable operating segments consistent with the way in which management organizes segments internally for making operating decisions and assessing firm performance (i.e. *management approach*). This means that segmental information has to be provided by operating segments[3], even if such segments cover more than one industry or geographical area. Consequently, SFAS 131 fundamentally changed the manner in which firms provide segmental information. The basis of segmentation may be by products and services, geographic area, legal entity, customer type, or another basis as long as it is consistent with the manner in which management organizes segments internally for decision-making purposes.

The adoption of the management approach in this standard should generally result in segments that differ by risk, return, and growth characteristics. At the same time, this should increase both reliability and consistency of segment disclosures as the same definitions employed internally are now used for external segment reporting. The

[3] Operating segments are defined as components of an enterprise (1) that engage in business activities earning revenues and incurring expenses, (2) that are regularly reviewed by management, and (3) for which discrete financial information is available.

management approach should also be more (direct) cost effective for preparers since the segment information is already available for internal uses.
In the final standard the FASB retained the 10 per cent materiality threshold used in SFAS 14 in the hope that the switch to the management approach and the tightening of the criteria for segment aggregation would lead to a greater number of segments. Concretely, this means that an enterprise has to report separately information about an operating segment if the segment's reported revenue is 10 per cent or more of the combined revenue of all segments, if the absolute amount of its reported profit or loss is 10 per cent or more of the combined profit (or loss), or if the segment's assets are 10 per cent or more of the combined assets of all operating segments. Besides, if total external revenue reported by segments is less than 75 per cent of total consolidated revenue, additional operating segments have to be identified as reportable segments until at least 75 per cent of total consolidated revenue is included in reportable segments.

Information about operating segments that do not meet any of these quantitative thresholds may be disclosed separately. An enterprise may combine information about different segments that do not meet the 10 per cent thresholds to produce a reportable segment only if the segments have similar economic characteristics.
Instead of requiring an alternative to the segmentation based on management structure when an enterprise is not (fully) divided into segments for managerial purposes, SFAS 131 introduced the requirement of enterprise-wide disclosures of additional information (revenues, assets) for and about each group of similar products/services and geographic operations if the basic disclosures do not provide this information.

(d) Conclusion

SFAS No. 131 has had a relatively significant impact on the disclosure of segment information by companies following US GAAP as can be illustrated by the following observations. First of all, the new statement resulted in an increase in the number of companies providing segment disclosure. Secondly, companies are now disclosing both more segments and more items for each operating segment. A majority of firms appear to define operating segments by product and services, while some define them by geographic area or a combination of both products and services and geographic areas. Finally, because of SFAS 131, enterprise-wide geographic disclosures increased the proportion of country-level geographic segments with a corresponding decrease in the proportion of broader geographic areas.

Thus, SFAS 131 represents a significant modification in U.S. segment-reporting guidelines. SFAS 14 defined reportable industry segments based on related products and services and also required limited disclosures for geographical regions and major customers. Alternatively, SFAS 131 requires companies to base reportable operating segments on the organization's internal structure, which is not necessarily by industry. In addition, SFAS 131 requires limited enterprise-wide disclosures for related products and services, geographic regions, and major customers. The new reporting rules resulted in a slightly finer disaggregation of segment information or in other words, a small increase in the number of segments per firm.

IAS 14 and SFAS 131 start with a different objective regarding segmental information reporting. The objective of IAS 14 is to provide insight into how the diversity of a company's different products and services and its operations in different geographical areas affects the overall risk and return. The FASB's objective is more general compared to the objective of IAS 14. At the same time, the US standard aims to provide information about an enterprise's different types of business activities and economic environments. The different objectives lead to differences between the two standards, though they are generally in agreement.

5.2.4 United Kingdom: SSAP 25 *"Segmental Reporting"*

(a) General

The accounting standard SSAP 25 "Segmental Reporting" was the final standard issued by the ASC in 1990 and amended in 1997 and 1998 by the ASB, the successor of the ASC. The standard, which becomes effective for UK financial statements with accounting periods beginning on or after July 1, 1990, was meant to improve the quality of financial statements reporting by providing shareholders with an analysis of consolidated information. SSAP 25 required companies to provide segmental disclosure in greater detail than previously required by the Companies Act and the Stock Exchange requirements[4], which forced companies that wanted to be listed to provide segmental information already in 1965.

The Companies Act 1985 required only two analyses, one regarding the operating activity dimension and the other relating to the geographical dimension. In the case that a company or group was active in two or more business classes that (in the opinion of the directors) differed substantially from one another, the law required a description of each class of business together with the sales and the profit or loss before taxation attributable to each class. If a company or group was active in geographic markets that (in the opinion of the directors) differed substantially from each other, then the law required only an analysis of sales.

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Insert Figure 4 About here

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The purpose of SSAP 25, of which the main considerations are summarized in Figure 4, is to provide information to assist users of financial information to make judgements about the nature of the entity's different activities and their contributions to the entity's overall financial position. By permitting a better understanding of the company's past performance, segmental data should allow users to appreciate more thoroughly the results and financial position of the entity, as well as its future prospects. SSAP 25 therefore requires the disclosure of turnover, segment result and segment net assets by class of business and by geographical segment.

While the standard contains some provisions relating to the statutory segmental disclosure which apply to all companies and which was introduced by prior accounting regulation, it also extends the scope of these requirements to include an entity that is a public limited company, that has a public limited subsidiary, that is a banking or insurance company, or that is a non-public limited company that exceeds

[4] London Stock Exchange Listing Agreement

two of the criteria, multiplied in each case by 10, for medium-sized companies[5]. Thus, segmental reporting required by statute was extended for public companies and certain specific industries (holdings and financial institutions) as well as for large private companies, although such a large company does not have to provide the information if its parents provides the required information. Nonetheless, SSAP 25 incorporates – in line with EU Directives - the option available to management to appeal to the prejudicial exemption that allows an entity not to disclose segmental information if disclosure would be - according to management - seriously prejudicial to its interests. When using this exemption clause, which appears to be rather exceptional in practise (Davies, Paterson and Wilson (1995)), management should mention this in the notes. As a result, the scope and application of the disclosure requirement is severely restricted.

(b) Information to be disclosed

An entity should report with respect to each segment the following information: (a) turnover, distinguishing between turnover by origin and by destination, unless no material difference exist between the two, and between inter-segment turnover and turnover derived from external customers, (b) result before accounting for taxation, minority interest and extraordinary items (mostly also before taking account of interest, except when all or part of the entity's business is to earn and/or incur interest or when interest income or expense is central to the business, then interest should be included), and (c) net assets (assets and liabilities used by more than one segment should be allocated to the segments on a reasonable basis). Besides, the entity should define in its financial statements each reported class of business and geographical segments. The total of the amounts disclosed by segment should agree with the related total in the financial statements. If it does not, the reporting entity should provide reconciliation between the two figures. Comparative figures for the previous accounting period should be provided.

It should be noted that common costs, costs relating to more than one segment; may be apportioned to segments only if this is not misleading (i.e. if they are directly attributable to individual segments). The standard also provides a special treatment of associated undertakings. The division of turnover between external and inter-segment sales helps to appreciate the interdependence of segments although the effect of this interdependence on results will be impossible to ascertain without knowledge of the inter-segment transfer pricing. The basis used for this inter-segment transfer pricing should not be disclosed. For listed companies, the amount of disclosure is expanded by requiring a geographical analysis of both net turnover and contribution to trading results of those foreign activities. This analysis is, however, only required if the profit or loss from a specific area is out of line with the normal profit margin.

The total of the amounts disclosed by segment should agree with the related total in the financial statements. If it does not, the reporting entity should provide reconciliation between the two figures. Comparative figures for the previous accounting period should be provided.

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[5] Criteria for medium-sized companies: turnover equal to £ 80 mio, total assets £ 39 mio and average number of employees: 2500.

(c) Segment identification

SSAP 25 states that when a company or group has two or more classes of business or operates in two or more geographical segments that differ significantly from each other, it should define its classes of business and geographical segments in its financial statements. As a result, UK regulators were proponents of both segmentation methods emphasizing the difference in risk and profitability between segments.

The selection of reportable segments is left to the judgement of the management of the reporting company given the variety and complexity of modern (multinational) business. SSAP 25 contains only a list of recommended characteristics that can be taken into consideration when identifying segments with differing risk-return profiles. SSAP 25 defines a reportable segment by reference to the relative size of the segment, namely 10 per cent or more of external sales, results or net assets. Nor the guidance provided to directors to help identify segments, nor the materiality criteria have the force of law. So, consistent with the international approach, SSAP 25 places responsibility for choice of segments with the company directors. Consequently, one can conclude that in practice any segment identification criterion is permitted.

(d) Conclusion

Although SSAP 25 provides no deterministic rules concerning the identification of "reportable segments", UK corporations are currently compelled to report segment information based on the "risk-return approach". Given the variety and complexity of modern (multinational) business, the selection of reportable segments is left to the judgment of management. SSAP 25 only suggests a number of characteristics that can be taken into account without obligations. The standard, for instance, defines a reportable segment by reference to the relative size of the segment. Therefore, in practice almost any criterion for identification is allowed.

SSAP 25 and IAS 14 have similar objectives and are essentially similar with some exceptions. SSAP25, for instance, requires 'segment net assets', while IAS 14 referred to 'assets employed'. Also SSAP 25 does not take a management approach to segment reporting as IAS 14 does. The use of the management approach is not precluded as long as it satisfies the objectives and definitions included in SSAP 25. Another significant difference concerns the exemption option provided in SSAP 25. Besides, IAS 14 requires disclosure of inter-segment pricing policy and it follows the US approach of analysing segments by total assets rather than by net assets. Thus, concluding, with careful choices, it may be possible to comply with both IAS 14 and SSAP25. On the other hand, UK regulation contains a number of crucial differences with US GAAP requirements concerning segmental reporting. For instance SFAS 131 requires, just like IAS 14, the basis of inter-segment pricing to be disclosed and does not include the prejudicial exemption. Within the European Union, the UK, however, clearly has the most comprehensive segmental reporting regulation.

5.2.5 European Union

(a) General

In its attempt to realise and preserve the free movement of people, capital, and goods within the united single market, EU legislative bodies issued a number of accounting regulating directives. By the Fourth and Seventh Directive[6], the EU has recognised the need for companies to provide segmental information. However, the segmental requirements are very limited in scope. EU regulation regarding segmental information incorporates very minimal requirements compared to those incorporated in US GAAP or IAS. Art. 43, § 1, (8) of the Fourth Directive states that additionally information should be provided regarding the net turnover broken down by categories of activity and into geographical markets in so far as, taking account of the manner in which the sale of products and the provision of services falling within the company's ordinary activities are organized, these categories and markets differ substantially from one another. The Seventh Directive (art. 34, § 2, (8)), which deals with consolidated accounts, incorporates identical requirements regarding consolidated net turnover. Figure 5 outlines the most important characteristics with regard to segmental disclosure following from the Fourth and Seventh Directive.

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Insert Figure 5 About here

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As a result, a company only needs to disclose net turnover broken down by type of activity and by geographical markets in so far as these activities and markets differ substantially from one another The disaggregated information that is accordingly provided can be included into the notes on the accounts. It may be noted that an exposure draft of the Fourth directive also included a requirement of disclosing also segmented income figures, which however was not retained in the final text.

Clear criteria or advices that can be used to define or identify segments were not included in the regulation. Moreover, the EU Directives allow Member States to incorporate two exemption clauses in their national standards (art. 45, 2). First of all, companies fearing a serious damage from making public segmental information may obtain an exemption from the supervising authorities. Secondly, based on their size, a number of smaller corporations may also be eligible for exemption. The EU regulation offers its Member States the option to incorporate an exemption for small enterprises[7], as well as one for medium-sized enterprises[8]. Only the UK and Ireland have national standards that go far beyond the requirements of the 4th and 7th directive. Other EU members merely adopted regulation from EU directives.

(b) Belgium and its neighbouring countries

As in many other European Union members, Belgian legislation regarding segmental reporting consists solely of the implementation of EU directives into national law. Consequently, Belgian accounting principles require solely a partition of net turnover

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[6] The two EU Directives dealing with accounting regulation are the 4th and the 7th Directive. The former one dates from 1978 and deals with the preparation and content of financial statements, the latter one (issued in 1983) contains EU policy on accounting for consolidations and group accounting.

[7] Companies which on their balance sheet dates do not exceed the limits of two of the three following criteria: balance sheet total: € 1 million net turnover: € 2 million, average number of employees during the financial year: 50. This exceeding of two of the three limits should occur in two consecutive years.

[8] Companies which on their balance sheet dates do not exceed the limits of two of the three following criteria: balance sheet total: € 4 million net turnover: € 8 million, average number of employees during the financial year: 250. This exceeding of two of the three limits should occur in two consecutive years.

based on industry categories and geographical segments[9]. The analysis of turnover broken down by categories of activity and by geographical markets must be included in the notes. The regulation does not include clear criteria or advices that can be used to define or identify segments. Besides, both exemption clauses provided by the EU Directives were included in Belgian law, although the size-based exemption only is applicable to small firms. The Belgian legislative bodies made such exemptions subject to prior administrative or judicial authorization. Besides, the exemption is only granted for one year and must be disclosed in the notes.

In France, legislation imposes only disclosure of turnover by type of activity and by geographical market to the extent that the activities or markets differ substantially from each other. However, no disclosure of this kind of information is required if this would significantly damage the firm's interests, which should in that case be mentioned in the notes to the accounts. This means that French segmental reporting regulation is strictly limited to what the EU Directives recommend. In practice, many listed firms often exceed these minimal disclosure requirements.

Segmental information was relatively unknown in Germany prior to 1985 when the Fourth and Seventh EU Directives were incorporated into German accounting regulation. Since that time, the German Handelsgesetzbuch (HGB), the German commercial code, meets the requirements of the EU directives regarding segmental reporting, but does not exceed them. Only large German companies[10] are required to publish segmental information for ordinary and for consolidated financial statements. The obligation to disclose net sales by business activity and geographical segments only applies if there are different forms of sales organisation in these different product or regional markets. Besides, this disclosure requirement can be ignored if the provision of this information is harmful to the company or group. The practical implementation of segmental reporting has been slow because of the weak interpretation of the requirements in commentaries on the HGB. At present, however, one can observe more segmental disclosure by large German multinational enterprises.

In The Netherlands the basic requirement on segmental reporting is set out in the Civil Code, but further guidance is provided by the Council on Annual Reporting (Raad voor de Jaarverslaggeving). Net turnover should be reported by industry and geographic area. If net turnover in a segment exceeds 10 per cent of the total net turnover, separate disclosure should be made in any case. The requirements of the Civil Code are less demanding than those of IAS 14. Moreover, companies are left with considerable discretion in segmental reporting, like for instance the disclosure of segmental profit and loss (and assets) information. Surveys have shown that most firms give some form of geographical data, but the level of detail is very variable. A firm may apply for exemptions from disclosures that are deemed to be competitively harmful.

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Insert Figure 6 About here

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[9] Koninklijk Besluit van 30 januari 2001 (art. 91, A, XII.A) en Koninklijk Besluit van 6 maart 1990

[10] Companies with on two successive balance sheet dates a total assets number larger than DEM 15.5 mio, a turnover of DEM 32 mio or more, and 250 employees.

Consequently and as confirmed in Figure 6 which compares segmental reporting regulation in the EU countries discussed above, accounting requirements are quite comparable and rather limited in content within Europe except for the UK, but this does not necessarily mean that accounting practice and thus financial statements with respect to segmental information are also comparable. Two reasons support this statement. First, due to vague segmental disclosure guidelines in most continental European countries, following from the EU Fourth Directive, considerable latitude is given to directors. Secondly, there is a trend in some European countries and by multinational European corporations to adopt international principles that exceed the national norms in the published annual reports or even to disclose more information voluntarily than they are obliged to according their national requirements. As a result, one can hypothesize that information disclosure will widely vary across companies adopting national versus those adopting international standards (Gray and Roberts (1989), Haller and Park (1994), Knoops et al. (1996)). This of course diminishes in an important way the usefulness and utility of this type of information for external users.

6. Conclusion

While in the past the argument has been advanced that the costs of providing segmental information exceed the benefits, practical experience has tended to prove the opposite and the benefits nowadays are regarded as being larger than the costs. Segmental reporting helps investors to make better informed decisions since it allows them to estimate the impact that changes in components of a business may have on the entity as a whole

The objective of segmental reporting is to provide information about the different types of business activities and different geographical environments in which the enterprise operates so as to help users of financial statements (a) to better understand the enterprise's performance, (b) to better assess its prospects for future net cash flows, and (c) make more informed judgments about the enterprise as a whole. This objective is consistent with the objectives of general-purpose financial reporting.

The positive elements of segmental reporting have to be taken into account by the legislative bodies when preparing accounting principles. Accounting practitioners should also take account of these arguments, but they should try to incorporate fully the positive consequences of these additional disclosure requirements when applying them. Finally, users of this kind of financial information should be careful when interpreting and comparing the disaggregated information provided.

Legislative bodies and regulators have accepted the need for segmental reporting for many years although the requirements introduced are often limited. When analyzing international and national segmental reporting regulation in detail, it clearly emerges that it is another accounting area where the different accounting philosophies behind the different national accounting standard setting systems become strikingly obvious. The recommendations on segmental reporting issued by international organizations such as the International Accounting Standards Board (IASB), the OECD and the UN require far more disclosure compared to most national regulators. Each of these organizations developed their own set of recommendations, which are only voluntary and not mandatory. Nevertheless, four countries, namely Australia, Canada, the UK and the US, have developed their own segmental reporting regulations, resulting in very detailed national standards. The most stringent standards in this area can be found in the USA and UK. The most comprehensive regulatory framework is probably present in the United States. Due to vague guidelines in most continental European countries about this subject, following from the EU Fourth Directive, considerable latitude is given to directors. As a result, one can hypothesize that information disclosure will widely vary across companies (Cervera et al. 1996). This of course diminishes in an important way the usefulness and utility of this type of information for external users. The explanation may be found in the different attitude towards the objective of financial reporting. While the provision of decision-useful information on the economic situation and performance of a company may be the main motive in Anglo-Saxon accounting standard setting, the European continental accounting models may be driven more by the ability to calculate reliable performance numbers.

The content of the major standards of segmental reporting developed by international and domestic standard-setting bodies can be reduced to a broad base of common principles. First of all, only diversified corporations are in general obliged to present segmental information. Secondly, segmental reporting should be based on the "disaggregation approach", where the entity's result is divided in segments based on a line of business or geographical approach. None of these regulations formulates, however, any specific or precise rules with respect to the identification of segments. Finally, the information disclosed by segment should address the following items: a brief overview and description of each segment, information about revenues (internal and external), assets, the calculation base for transfer prices, assurance about the consistency and accordance between disaggregated and aggregated information, more information about changes in the segmental reporting approach.

These requirements ensure a minimum level of segmental information but leave a lot of questions unanswered. Nevertheless, many listed companies provide considerably more detailed information than has been required. Despite the imperfection of current accounting legislation on segmental reporting, it must be stressed that the information disclosed holds important and valuable insights for the users of financial statements.

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Figure 1 - Segmental regulation issued by the United Nations and the OECD

	United Nations (ISAR)	**OECD**
Regulation	Code of Conduct (°1977, adapted in 1988 and 1994)	Declaration on International Investment and Multinational Enterprises (°1976, revised in 1979)
Focus	Public and other significant	Multinational enterprises
Items to be disclosed	• Segment revenue (sales) to outsiders and inter-segment sales • Segment result (operating profit) • Segment assets (employed) • Segment employees	• Segment revenue (sales) to outsiders • Segment result (operating profit) (only geographically) • Segment capital expenditures • Segment employees (only geographically)
Reconciliation	Yes	No
Segment identification base	• Line of business • Geographical markets	• Line of business • Geographical markets
Materiality treshold	No	No
Special comments	No enforcement power	No enforcement power

Figure 2 - Segmental regulation issued by the International Accounting Standards Board (IASB)

	International Accounting Standards
Regulation	IAS No. 14 (IASB 1991, Revised in 1997)
Implementation	Effective for accounting periods beginning on or after July 1, 1998
Focus	Limited to all public enterprises (private enterprises are not required, but encouraged)
Information source	Segment information needs to be presented only on the basis of the consolidated financial statements when one financial report contains both the consolidated financial statements and the separate financial statements of all companies consolidated. If, however, the securities of a consolidated firm (subsidiary, associate or joint venture) itself are publicly listed, it will have to present its own appropriate segment disclosures in its own financial statements.
Items to be disclosed	In general (determined before intra-group balances and transactions are eliminated): • Segment revenue(sales) • Segment expense • Segment assets employed • Segment liabilities • Basis for inter-segment pricing For primary segments: • segment revenue, segment revenue from sales to external customers and segment revenue from transactions with other segments • segment (operating) result • segment assets and liabilities • segment depreciation and amortization • other non-cash expenses per segment • capital investments in property, plant and equipment • intangible per segment • other less important elements • basis of inter-segment pricing For secondary segments: • segment revenue • segment assets • capital investments in property, plant and equipment • intangibles per segment
Reconciliation	Yes, if total of the amounts disclosed by reportable segments differs from the total of the enterprise's consolidated financial statements
Segment identification base	Three step approach: 1. identification of primary and secondary segments (based on source of risks and returns) 2. identification of both business segments and geographical segments 3. identification of reportable segments
Materiality treshold	A reportable segment is a segment for which - segment revenue from external and internal sales is 10% or more of the combined revenue, or - segment result is 10% or more of the combined result, or - segment assets are 10% or more of combined assets Total external revenue reported by "reportable" segments needs to be 75% or more of total consolidated revenue.
Exemption clause	No
Special comments	No enforcement power

Figure 3 - Segmental regulation in the United States

	United States
Regulation	SFAS No. 131 (FASB 1997)
Implementation	Effective for fiscal years beginning on or after January 1, 1998
Focus	Limited to public enterprises
Information source	Segment information needs to be presented only on the basis of the consolidated financial statements when one financial report contains both the consolidated financial statements and the separate financial statements of all companies consolidated. If, however, a consolidated firm (subsidiary, associate or joint venture) is publicly listed and publishes separate financial statements, it will have to present its own appropriate segment disclosures in its own financial statements.
Items to be disclosed	• Segment revenue, internal and external segment revenues • Segmental profit or loss • Segment assets • Depreciation, depletion, and amortization expense • Other significant non-cash items • Unusual and extraordinary items • Total assets • Capital expenditures • Interest expense and interest revenue • Income tax expense or benefit (if included in the measure of segmental profit/loss) • Equity in the net income of investments accounted for by the equity method, amount of investment in equity method investees • Total expenditures for additions to long-lived assets • Factors used to identify the reportable segments • Basis for inter-segment pricing
Reconciliation	Yes, if total of the reportable segments differs from the total of the enterprise's consolidated financial statements (such reconciliation is necessary for the revenue numbers, elements of profit or loss, assets, and amounts for every other significant item)
Segment identification base	Management approach (internal organization's structure) is used. Consequently, operating segments can be identified based on: • line of business (products and/or services) • geographical area • legal entity • customer type • other (as long as it is consistent with management's internal organization)

Figure 3 - Segmental regulation in the United States (*Continued*)

Materiality treshold	A reportable operating segment is a segment for which - segment's reported revenue is 10% or more of the combined revenue, or - absolute value of segment's reported profit or loss is 10% or more of the combined profit (or loss), or - segment's assets are 10% or more of combined assets of all operating segments Total external revenue reported by "reportable" segments needs to be 75% or more of total consolidated revenue
Exemption clause	No
Special comments	Requirement of enterprise-wide disclosure of additional information for and about each group of similar products/services and geographic operations if the basic disclosures (in line with management approach) do not provide this information.

Figure 4 - Segmental regulation in the United Kingdom

	United Kingdom
Regulation	SSAP No. 25 (ASC 1990, amended by ASB in 1997 and 1998)
Implementation	Effective for accounting periods beginning on or after July 1, 1990
Focus	Limited to public enterprises and large private and specific enterprises
Information source	Consolidated financial statements (if available)
Items to be disclosed	• Segment turnover, distinguishing between turnover by origin and by destination, unless no material difference exist between the two, and between inter-segment turnover and turnover derived from external customers, • Segment result before accounting for taxation, minority interest and extraordinary items (mostly also before interest) • Segment net assets • Definition of each reported class of business and geographical segment.
Reconciliation	Yes, if total of the amounts disclosed by reportable segments differs from the total of the enterprise's consolidated financial statements
Segment identification base	Line of business and geographical (selection is left to the judgment of management)
Materiality treshold	No
Exemption clause	Yes, no disclosure if disclosure would be prejudicial to enterprise's interests (exercise of this clause needs to be mentioned in the notes)
Special comments	- Basis used for inter-segment pricing needs not to be disclosed - Comparative figures for the previous accounting period should be provided

Figure 5 - Segmental regulation issued by the European Commission

	European Union
Regulation	4^{th} (1978) and 7^{th} (1983) EC Directive
Implementation	Effective for fiscal years beginning on or after January 1, 1998
Focus	Public and private enterprises
Information source	Consolidated and individual financial statements
Items to be disclosed	• Net turnover • Consolidated net turnover
Reconciliation	No
Segment identification base	• Line of business (activity) • Geographical markets
Materiality treshold	No
Exemption clause	Yes, - companies fearing a serious damage from making public segmental information may obtain an exemption from their supervising authorities - small and/or medium-sized companies may also be eligible for exemption
Special comments	Segmental information may be included in the notes.

Figure 6 - Segmental regulation in a number of European Union Member States

	Belgium	France	Germany	The Netherlands
Regulation	R.D. January 30, 2001 (1976 revised)	Code commercial	Handelsgesetzbuch (HBG)	Civil Code & Raad voor de Jaarverslaggeving
Focus	Public and private	Public and private	Public and private	Public and private
Information source	Consolidated and individual F.S.	Consolidated and individual F.S.	Consolidated and individual F.S.	Consolidated and individual F.S.
Items to be disclosed	Turnover	Turnover	Net turnover (net sales)	Net turnover
Reconciliation	No	Segment revenue is 10% or more, segment result is 10% or more, or segment assets are 10% or more of total	No	No
Segment identification base	• Line of business • Geographical markets	• Line of business • Geographical markets	• Line of business • Geographical markets	• Line of business • Geographical markets
Materiality treshold	No	No	No	Segment net turnover is 10% or more of total net turnover
Exemption clause	Yes [1 and 3]	Yes [1]	Yes [1 and 2]	Yes [1]

1 Exemption for companies fearing a serious damage from making public segmental information may obtain an exemption from their supervising authorities
2 Exemption for small and medium-sized companies may also be eligible for exemption
3 Exemption only for small companies may also be eligible for exemption